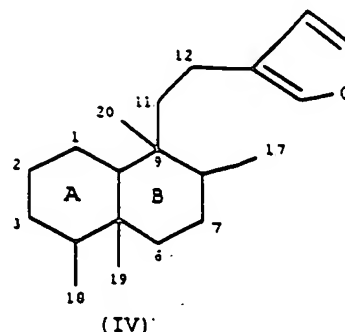
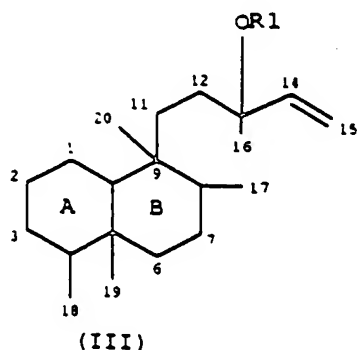


In the Claims:

Please cancel Claim 15, without prejudice. Please amend Claims 1, 2, 16, 17, and 18, and add new Claims 19-23, as follows.

1. (Twice Amended) A prolactin lowering drug comprising at least one bicyclic diterpene compound of the clerodane type in accordance with at least one of general formulae (III) or (IV):



wherein  $R_1 = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein the rings A and/or B in the case of general formulae (III) or (IV) are optionally substituted in position 1, 2, 3, 4, 6, 7, or 8 with at least one OX radical, with  $X = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein optionally at least one carbon atom in position 17, 18, 19 and 20 is substituted with an OX radical, with  $X = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein optionally at least one  $CH_3$  group in position 17, 18, 19 and 20 is replaced by one  $COOH$  group;

wherein optionally at least one of ring positions 1, 2, 3, 6, or 7 is a keto group;

and

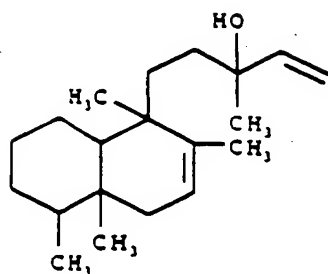
wherein optionally at least one double bond is present in ring positions 1, 2, 3, 6, 7, 8, 8(17) of formula (III); and

wherein optionally at least one double bond is present in ring positions 1, 2, 3, 4(18), 6, 7, 8, 8(17) of formula (IV);

with the exception of the following compounds:

(+) hardwickiic acid, crolechinic acid, and hautriwaic acid.

2.(Amended) A prolactin lowering drug according to claim 1, comprising a compound having the following formula:



Claim 15 is canceled.

16.(Amended) A method of treating premenstrual syndrome, mastodynia, or a disorder of the menstrual cycle to a woman in need of treatment, comprising:

administering a pharmaceutically acceptable formulation comprising the prolactin lowering drug of Claim 1 or Claim 2, or the compound of Claim 10 or Claim 12, to the woman in need of treatment.

17.(Amended) The method of Claim 16, wherein the disorder of the menstrual cycle is oligomenorrhea or amenorrhea.

18.(Amended) A method of lowering prolactin release by a mammalian pituitary cell, comprising:

adding the prolactin lowering drug of Claim 1 or Claim 2, or the compound of Claim 10 or Claim 12, to the cell in an amount sufficient to lower the release of prolactin by the cell, compared to a control not receiving the prolactin lowering drug or the compound.

Please add new Claims 19-23.

--19.(New) A prolactin lowering drug, comprising the compound of Claim 10.

20.(New) A prolactin lowering drug, comprising the compound of Claim 12.

21.(New) A method of treating premenstrual syndrome, mastodynia, or a disorder of the menstrual cycle to a woman in need of treatment, comprising:  
administering a pharmaceutically acceptable formulation comprising the prolactin lowering drug of Claim 19 or Claim 20, to the woman in need of treatment.

22.(New) The method of Claim 21, wherein the disorder of the menstrual cycle is oligomenorrhea or amenorrhea.

23.(New) A method of lowering prolactin release by a mammalian pituitary cell, comprising:  
adding the prolactin lowering drug of Claim 19 or Claim 20, to the cell in an amount sufficient to lower the release of prolactin by the cell, compared to a control not receiving the prolactin lowering drug.--.

#### REMARKS

##### The Pending Claims

Before entry of the amendments hereinabove, Claims 1, 2, 10, 12, and 15-18 are pending in the above-captioned application. Claims 1, 2, and 15 relate to a prolactin lowering drug. Claims 10 is directed to cleroda-Y,14-dien-13-ol. Claim 12 relates to cleroda-Y, Z, 14-trien-13-ol. Claims 16-17 relate to a method of treating premenstrual syndrome, mastodynia, or a disorder of the menstrual cycle to a woman in need of treatment. Claim 18 is directed to a method of lowering prolactin release by a mammalian pituitary cell.

The Office Action and Applicant's Amendment

The Examiner withdrew the rejection of Claim 1 for misjoinder of inventions, in view of the amendment of Claim 1 in Applicant's response to Office Action, which Applicant mailed October 24, 2002.

The Examiner withdrew the rejection of Claim 10, under 35 U.S.C. § 102(b) as being anticipated by Rudi *et al.* and Misra *et al.*, in view of the amendment of Claim 10 in Applicant's response to Office Action, which Applicant mailed October 24, 2002.

The Examiner allowed Claims 10, 12, and 15.

Claims 1, 2 and 16-18 were rejected under 37 C.F.R. § 112, second paragraph for the following reasons:

In Claim 1 (final paragraph), the Examiner stated that "the only compounds that need to be provisoed out of claim 1 are the fourth through sixth. The others, which are labdane derivatives are not covered by the main part of the claim." In response, Applicant has amended Claim 1 to delete the recitation of all of the labdane derivative compounds in the proviso, and leaving the clerodane derivatives (+) hardwickiic acid, crolechnic acid, and hautriwaic acid, which amendment is believed to overcome the ground of rejection.

In addition, Applicant has amended Claims 1 and 2 to recite the transitional language "comprising" instead of the word "containing" (e.g., Claim 1) or the expression "characterized by containing" (e.g., Claim 2). These amendments are made merely for greater clarity, and Applicant believes they engender no change in claim scope. In a telephonic interview graciously granted to Applicant's undersigned attorney on November 26, 2002, Examiner Dentz stated that such amendment would be acceptable to the Examiner.

The Examiner stated that Claims 16 and 18 should refer to "protection containing drug [sic]." Based on a telephonic interview with Examiner Dentz, graciously granted to Applicant's undersigned attorney on November 18, 2002, Applicant believes this is a typographical error, and that the Examiner intended to state that Claims 16 and 18 should recite the "prolactin lowering drug" (as recited in the preambles) of Claim 1 or Claim 2, not

the "compound" of Claim 1 or Claim 2. Accordingly, Applicant has amended Claims 16 and Claim 18 to overcome the basis of the rejections.

In Claim 17, the expression "olig-to amenorrhea" is inapt. In response, Applicant has amended Claim 17 to recite "oligomenorrhea or amenorrhea." This amendment does not narrow the intended scope of Claim 17, since "oligomenorrhea" represents an art-recognized range of degree for the disorder. In view of the amendment, the Examiner is respectfully requested to withdraw the rejection.

The Examiner required that Applicant file a formal rendering of Figure 1, which overcomes the objections cited in form PTO-948. Accordingly, Applicant submits herewith a formal rendering of Figure 1, pending approval of the Examiner of an amendment to correct a typographical error in Figure 1, as originally filed, that unintentionally reversed the order of the concentration labels for Preparation 119 under the x-axis (i.e., "0.02 mg" on the left now amended to "0.002 mg"; and "0.002 mg" on the right now amended to "0.02 mg"). The original typographical error is obvious in view of the dose effect seen for all the other preparations, for which "0.002 mg" is to the left of "0.02 mg", and the larger prolactin lowering effect is seen with the larger 0.02 mg-dose. The amended Figure 1 shows the dose-effect results for Preparation 119 to be consistent with the results for all the other preparations, as actually occurred. Further support for this amendment is found in the specification at page 12, line 14 through page 13, line 3.

Applicant has added new Claims 19-23.

New Claims 19 and 20, respectively, are directed to the same subject matter as allowed Claim 15, which has been canceled without prejudice. Applicant has merely taken the multiple dependency in allowed Claim 15 and made two separate, singly dependent claims. Nevertheless, support for new Claims 19 and 20, respectively, is found in the specification as originally filed, e.g., in Claims 11 and 13, as filed under 35 U.S.C. § 371 (see, Claims 16 and 18, as originally filed before claim renumbering under the PCT); at page 4, lines 7-16; at page 7, lines 15 through page 8, line 10; Figure 1; and at page 12, line 9 through page 13, line 3.

Support for new Claim 21 is found in the specification as originally filed, e.g., in Claims 9, 11 and 13, as filed under 35 U.S.C. § 371 (see, Claims 14, 16, and 18, as originally filed before claim renumbering under the PCT); at page 4, lines 7-16; at page 7, lines 15 through page 8, line 10; Figure 1; and at page 12, line 9 through page 13, line 3.

Support for new Claim 22 is found in the specification as originally filed, e.g., in Claims 9, 11 and 13, as filed under 35 U.S.C. § 371 (see, Claims 14, 16, and 18, as originally filed before claim renumbering under the PCT); at page 4, lines 7-16; at page 7, lines 15 through page 8, line 10; Figure 1; and at page 12, line 9 through page 13, line 3.

Support for new Claim 23 is found in the specification as originally filed, e.g., at page 4, lines 7-16; at page 7, lines 15 through page 8, line 10; Figure 1; and at page 12, line 9 through page 13, line 3.

#### CONCLUSION

In view of the above amendments and remarks, it is submitted that this application is now ready for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (213) 896-6665.

Respectfully submitted,

By: 

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Reg. No. 40,345

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Fax: 213/ 896-6600

Version With Markings To Show Changes Made

In the Specification:

Please delete Figure 1, and insert therefor the following amended Figure 1.

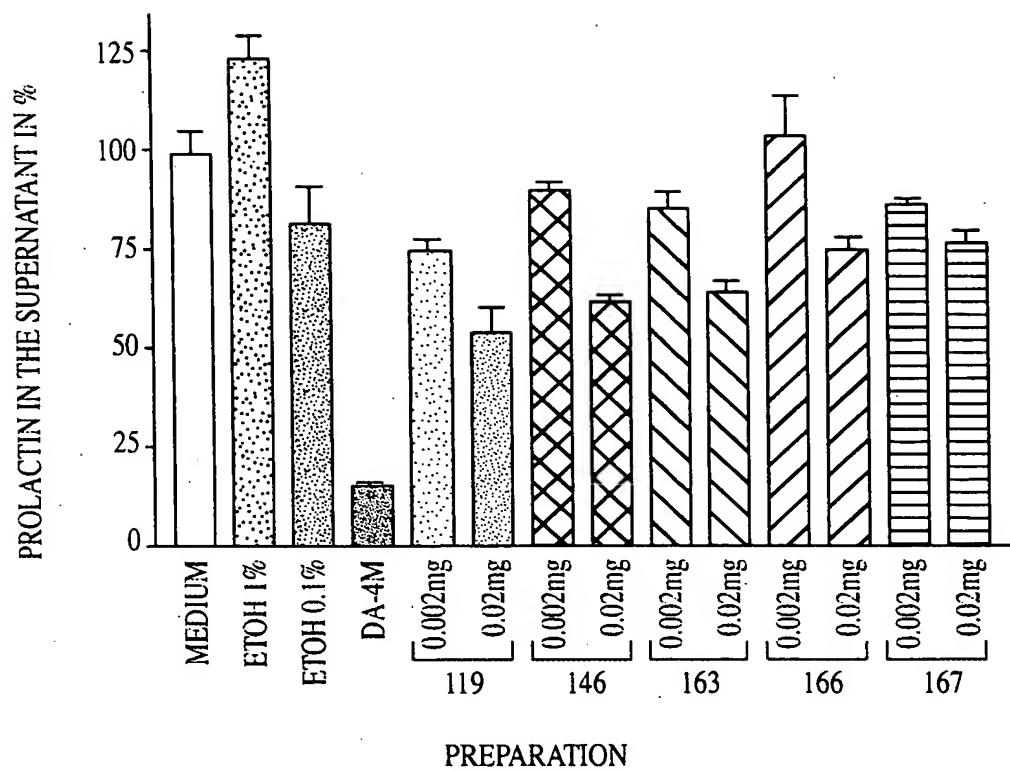


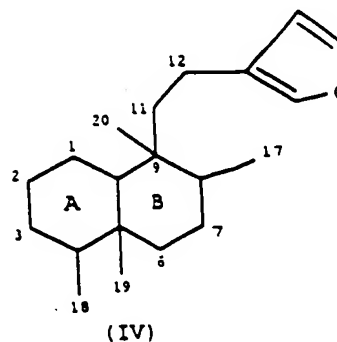
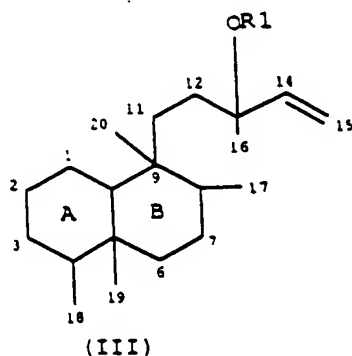
FIG. 1



In the Claims:

Please cancel Claim 15, without prejudice. Please amend Claims 1, 16, 17, and 18, and add new Claims 19-23, as follows.

1. (Twice Amended) A prolactin lowering drug [containing] comprising at least one bicyclic diterpene compound of the clerodane type in accordance with at least one of general formulae (III) or (IV):



wherein  $R_1 = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein the rings A and/or B in the case of general formulae (III) or (IV) are optionally substituted in position 1, 2, 3, 4, 6, 7, or 8 with at least one OX radical, with  $X = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein optionally at least one carbon atom in position 17, 18, 19 and 20 is substituted with an OX radical, with  $X = H$ ,  $C_1$  to  $C_3$  alkyl or  $C_1$  to  $C_3$  acyl;

wherein optionally at least one  $CH_3$  group in position 17, 18, 19 and 20 is replaced by one  $COOH$  group;

wherein optionally at least one of ring positions 1, 2, 3, 6, or 7 is a keto group;

and

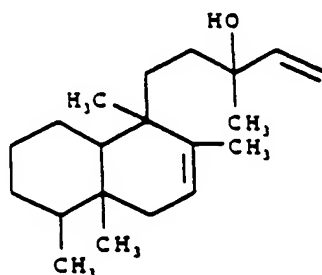
wherein optionally at least one double bond is present in ring positions 1, 2, 3, 6, 7, 8, 8(17) of formula (III); and

wherein optionally at least one double bond is present in ring positions 1, 2, 3, 4(18), 6, 7, 8, 8(17) of formula (IV);

with the exception of the following compounds:

[rotundifuran, sclareol, larixol acetate, 7 $\alpha$ -hydroxy-manool, ](+)-hardwickiic acid, crolechinic acid, and hautriwaic acid[, ent-15,16-epoxy-9 $\alpha$ H-labda-13(16)14-diene-3 $\beta$ , 8 $\alpha$ -diol, solidagenon and 15, 16-epoxy-8(17),14,16-labdatrien-19-oic acid methyl ester].

2.(Amended) A prolactin lowering drug according to claim 1, [characterized by containing]comprising a compound having the following formula:



Claim 15 is canceled.

16.(Amended) A method of treating premenstrual syndrome, mastodynia, or a disorder of the menstrual cycle to a woman in need of treatment, comprising:

administering a pharmaceutically acceptable formulation comprising the prolactin lowering drug of Claim 1 or Claim 2, or the compound of [any of] Claim[s] 1, 2, ]10[,] or Claim 12, to the woman in need of treatment.

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18.(Amended) A method of lowering prolactin release by a mammalian pituitary cell, comprising:

adding the prolactin lowering drug of Claim 1 or Claim 2, or the compound of [any of] Claim[s 1, 2, ]10[,] or Claim 12, to the cell in an amount sufficient to lower the release of prolactin by the cell, compared to a control not receiving the prolactin lowering drug or the compound.

Please add new Claims 19-23.

- 19.(New)                    A prolactin lowering drug, comprising the compound of Claim 10.
- 20.(New)                    A prolactin lowering drug, comprising the compound of Claim 12.
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                                 adding the prolactin lowering drug of Claim 19 or Claim 20, to the cell in an amount sufficient to lower the release of prolactin by the cell, compared to a control not receiving the prolactin lowering drug.--.